REMARKS

Claims 1, 3-12, 26, 38-49, 74, 91 and 175-192 are pending in the Application. Claims 26, 38-48, 74, 91, 179-182, 186 and 189 were allowed, claims 1, 3-6, 9-11, 49, 175-178, 183-185, 187, 188 and 190-192 were rejected, and claims 12 and 178 were objected to in the non-final Office Action mailed January 25, 2007. Claims 1, 26, 49, 74, 175 and 178-182 are independent claims. Claims 3-12 and 183-185, claims 38-48 and 186, claims 187 and 188, claims 91 and 189, claims 176, 177, 190 and 191, and claim 192 depend either directly or indirectly from independent claims 1, 26, 49, 74, 175 and 178, respectively.

Applicants respectfully request reconsideration of claims 1, 3-12, 26, 38-49, 74, 91, 175-178, and 183-192, in light of the above amendments and the following remarks.

Amendments to the Claims

Claims 12, 46, 178 and 181 have been amended to more clearly define the claimed subject matter. Applicants respectfully submit that no new matter is added by these amendments.

Objections to the Claims

Point 1: Claim Objections

Claims 12 and 178 were objected to due to informalities. Applicants have amended claims 12 and 178 as described above in an effort to further the Application towards allowance. Applicants respectfully submit that the objections have been overcome, and request that the objections to claim 12 and 178 be withdrawn.

Point 10: Allowable Subject Matter / Claim Objections

Claims 7, 8, and 12 were objected to in the Office action as being dependent upon a rejected base claim, but were deemed allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicants respectfully traverse the rejection of the respective base claims. Claims 7, 8 and 12 depend either directly or indirectly from independent claim 1. Applicants believe that the rejection of claim 1 has been overcome, and that claim 1 is allowable, for at least the reasons set forth below. Therefore, the Applicants respectfully request that the objections to claims 7, 8 and 12 be withdrawn.

Rejection of Claims

Point 3: Rejections Under 35 U.S.C. §103(a): Guy, Bartholomew and Shaffer

Claims 1, 3, 49, 175-177, 183, 184, 187 and 190 were rejected under 35 U.S.C. §103(a) as being unpatentable over Guy et al. (US 5,187,591, hereinafter "Guy") in view of Bartholomew et al. (US 6,292,479, hereinafter "Bartholomew") and Shaffer et al. (US 6,411,601, hereinafter "Shaffer"). The Applicants respectfully traverse the rejection.

The Applicants respectfully submit that the Examiner has failed to establish a case of *prima facie* obviousness for at least the reasons provided below. M.P.E.P. §2142 clearly states that "[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." The M.P.E.P. §2142 goes on to state that "[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed

combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure."

With regard to claims 1 and 49, the Applicants respectfully submit that the proposed combination of references, taken alone or in any combination, fails to teach, suggest, or disclose, for example, "...a resource monitor that monitors processor resources used by one or both of the voice exchange and the data exchange, and that dynamically enables and disables signal processing functionality used by the one or both of the voice exchange and the data exchange in the exchange of one or both of the voice and data signals of a call, to control processor computational load...", as recited in Applicants' claim 1; and "...dynamically enabling and disabling signal processing functionality used in the exchange of one or both of the voice and data signals of a call, to control processor computational load...", as recited in Applicants' claim 49.

Rather, Guy discloses determining whether a discriminator 20 will direct a switch 18 "to pass the signals coming in to the switch either to a transformer 22 of aural information or to demodulator equipment 24 depending upon whether the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 4-9). Shaffer discloses the following:

> [T]he resource availability monitor determines if Digital Signal Processor (DSP) requirements in the call request exceed DSP availability. If the resource requirements exceed the resource availability at the time when the call request is received, a resource reservation mechanism places the call request into network resource queues for those network resources which are in short supply. When the call request reaches the front of one of the network resource queues, the resource reservation mechanism reserves the network resource for a predetermined time interval and determines whether all resource requirements for the call request can be satisfied. If so, the call is established.

(Shaffer, Abstract).

The Office Action alleges that Guy discloses a monitor (see FIG. 2, Discriminator 20) that monitors processor used by on [sic] or both of the voice exchange and the data exchange (see FIG. 1-2, Discriminator 20 monitors/detects processing of aural module and modulator/demodulator module; see col. 3, line 59 to col. 5, line 46)." (Office Action, Page 17, Lines 16-19). However, Applicants' claim 1 sets forth "a **resource** monitor that monitors processor **resources**." As mentioned above, Guy fails to disclose a resource monitor that monitors processor resources. Rather, Guy discloses determining whether "the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 8-9). The call discriminator in Guy is different than the resource monitor as set forth in Applicants' claim 1. Applicants appreciate recognition in the Office action that "[n]either Guy nor Bartholomew explicitly discloses processor resources and controlling processor computational load." (Office Action, Page 5, Lines 4-5).

With regard to Shaffer, the Office Action alleges Shaffer discloses the following:

> [A] resource monitor (see FIG. 2, Resources availability monitor 42 of the gateway 10) that monitors processor resources used by one or both of voice processing (see FIG. 2, resource requirement module 40; see col. 4 line 25-30; voice only processing) and data processing (see FIG. 2, resource requirement module 40; see col. 4, line 25-35; video processing), and that dynamically enables (see FIG. 4, step 74, 84; based on DSP/CPU resource availability dynamically processing the call) and disable signal processing functionally (see FIG. 4, 74, 76, 78, 80; based on DSP/CPU resource availability dynamically holding/stopping/disabling the processing of a call) used by one or both of voice processing and the data processing in the exchange of one or both of the voice and data of a call, to control processor computational load (see col. 4, line 1-47; col. 6, line 60 to col. 7, line 50; processing voice video, or both used/required by a voice/video/both call to control DSP resources/load).

(Office Action, Page 18, Lines 9-21). However, Shaffer does not teach "dynamically enables and disables signal processing functionality used by the one or both of the voice exchange and the data exchange in the exchange of one or both of the voice signals **of a call**, to control processor computational load...", as alleged in the Office Action. Rather, Shaffer

discloses "determin[ing] if Digital Signal Processor (DSP) requirements **in the call request** exceed DSP availability. If the resource requirements exceed the resource availability at the time **when the call request is received**, a resource reservation mechanism **places the call request** into network resource queues for those network resources which are in short supply." (Shaffer, Abstract). Further, Shaffer fails to disclose dynamically enabling and disabling signal processing functionality because, for example, in Shaffer a call has yet to be established and placing the call request into network resource queues is different than dynamically enabling and disabling signal processing functionality. Basically, Shaffer does not "dynamically process[] **the call**" (Office Action, Page 18, Line 15) or "dynamically hold[]/stop[]/disabl[e] the processing of **a call**" (Office Action, Page 18, Lines 16-17) as alleged in the Office Action. Rather, the resource availability monitor 42 and the resource requirement module 40 in Shaffer disclose the handling of **call requests prior to the establishment of a call**. The management of **call requests** in Shaffer is different than "...a resource monitor that monitors processor resources used by one or both of the voice exchange and the data exchange, and that dynamically enables and disables signal processing functionality used by the one or both of the voice exchange and the data exchange in the exchange of one or both of the voice and data signals **of a call**, to control processor computational load...", as recited in Applicants' claim 1; and "...dynamically enabling and disabling signal processing functionality used in the exchange of one or both of the voice and data signals **of a call**, to control processor computational load...", as recited in Applicants' claim 49.

The Office Action states that "[i]n response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references." (Office Action, Page 19, Lines 1-3). However, Guy, Bartholomew and Shaffer, taken alone **or in any combination**, fail to teach "...a resource monitor that monitors processor resources used by one or both of the voice exchange and the data exchange, and that dynamically enables and disables signal processing functionality used by the one or both of the voice exchange and the data exchange in the exchange of one or both of the voice and data signals of a call, to control processor computational load...", as recited in Applicants' claim 1; and "...dynamically enabling and

disabling signal processing functionality used in the exchange of one or both of the voice and data signals of a call, to control processor computational load...", as recited in Applicants' claim 49.

Rather, the combination of Guy, Bartholomew and Shaffer discloses "providing an interface between the corresponding telephone system 10 and the Internet", (Bartholomew, Column 9, Lines 16-18), wherein the term Internet is "used interchangeably herein to denote a wide area packet switched network", (Bartholomew, Column 9, Lines 19-21). The combination of Guy, Bartholomew and Shaffer further discloses "determin[ing] if Digital Signal Processor (DSP) requirements **in the call request** exceed DSP availability. If the resource requirements exceed the resource availability at the time **when the call request is received**, a resource reservation mechanism **places the call request** into network resource queues for those network resources which are in short supply." (Shaffer, Abstract). Additionally, the combination of Guy, Bartholomew and Shaffer discloses, **once a call has been established**, determining whether "the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 8-9). The combination of Guy, Bartholomew and Shaffer is clearly different than "...a resource monitor that monitors processor resources used by one or both of the voice exchange and the data exchange, and that dynamically enables and disables signal processing functionality used by the one or both of the voice exchange and the data exchange in the exchange of one or both of the voice and data signals of a call, to control processor computational load...", as recited in Applicants' claim 1; and "...dynamically enabling and disabling signal processing functionality used in the exchange of one or both of the voice and data signals of a call, to control processor computational load...", as recited in Applicants' claim 49. Applicants therefore submit that Guy, Bartholomew and Shaffer, taken alone **or in any combination**, fail to teach all of the limitations of Applicants' claims 1 and 49, as required by MPEP §2142.

Therefore, Applicants believe that claims 1 and 49 are allowable over the proposed combination of references, for at least the reasons set forth above. Applicants respectfully submit that claims 3-12 and 183-185 and claims 187 and 188 depend either directly or indirectly from claims 1 and 49, respectively. Because claims 3-12 and 183-185 and claims 187 and 188 depend,

respectively, from claims 1 and 49, Applicants respectfully submit that claims 3-12 and 183-185 and claims 187 and 188 are also allowable, for at least the reasons set forth above with respect to claims 1 and 49, respectively. Therefore, Applicants respectfully request that the rejection of claims 1, 3, 49, 183, 184 and 187 under 35 U.S.C. §103(a) be withdrawn.

With regard to claim 175, the Applicants respectfully submit that the proposed combination of references fails to teach, suggest or disclose, for example, "dynamically enabling and disabling signal processing functionality during processing of the depacketized signal, to control processor computational load", as recited in Applicants' claim 175.

As recognized in the Office Action, "[n]either Guy nor Bartholomew explicitly discloses processor resources and controlling processor computational load." (Office Action, Page 8, Lines 19-20). Applicants respectfully submit, therefore, that Guy and Bartholomew also do not disclose "dynamically enabling and disabling signal processing functionality during processing of the depacketized signal, to control processor computational load", as recited in Applicants' claim 175.

Applicants also respectfully submit that Shaffer fails to teach or suggest "dynamically enabling and disabling signal processing functionality during processing of the depacketized signal, to control processor computational load." Shaffer discloses the following:

> [T]he resource availability monitor determines if Digital Signal Processor (DSP) requirements in the call request exceed DSP availability. If the resource requirements exceed the resource availability at the time when the call request is received, a resource reservation mechanism places the call request into network resource queues for those network resources which are in short supply. When the call request reaches the front of one of the network resource queues, the resource reservation mechanism reserves the network resource for a predetermined time interval and determines whether all resource requirements for the call request can be satisfied. If so, the call is established.

(Shaffer, Abstract).

With regard to Shaffer, the Office Action alleges Shaffer discloses the following:

> [D]ynamically enables (see FIG. 4, step 74, 84; based on DSP/CPU resource availability dynamically processing the call) and disable signal processing functionally (see FIG. 4, 74, 76, 78, 80; based on DSP/CPU resource availability dynamically holding/stopping/disabling the processing of a call) used by one or both of voice processing and the data processing in the exchange of one or both of the voice and data of a call, to control processor computational load (see col. 4, line 1-47; col. 6, line 60 to col. 7, line 50; processing voice video, or both used/required by a voice/video/both call to control DSP resources/load).

(Office Action, Page 20, Lines 13-21). However, Shaffer does not teach "dynamically enabling and disabling signal processing functionality **during processing of the depacketized signal**, to control processor computational load", as alleged in the Office Action. Rather, Shaffer discloses "determin[ing] if Digital Signal Processor (DSP) requirements **in the call request** exceed DSP availability. If the resource requirements exceed the resource availability at the time **when the call request is received**, a resource reservation mechanism **places the call request** into network resource queues for those network resources which are in short supply." (Shaffer, Abstract). Further, Shaffer fails to disclose dynamically enabling and disabling signal processing functionality because, for example, in Shaffer a call has yet to be established and placing the call request into network resource queues is different than dynamically enabling and disabling signal processing functionality. Basically, Shaffer does not "dynamically process[] **the call**" (Office Action, Page 20, Line 15) or "dynamically hold[]/stop[]/disabl[e] the processing of **a call**" (Office Action, Page 20, Lines 16-17) as alleged in the Office Action. Rather, the resource availability monitor 42 and the resource requirement module 40 in Shaffer disclose the handling of **call requests prior to the establishment of a call**. The management of **call requests** in Shaffer is different than "dynamically enabling and disabling signal processing functionality **during processing of the depacketized signal**, to control processor computational load", as recited in Applicants' claim 175.

The Office Action states that "[i]n response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references." (Office Action, Page 21, Lines 1-3). However, Guy, Bartholomew and Shaffer, taken alone **or in any combination**, fail to teach "dynamically enabling and disabling signal processing functionality **during processing of the depacketized signal**, to control processor computational load", as recited in Applicants' claim 175.

Rather, as mentioned above, the combination of Guy, Bartholomew and Shaffer discloses "providing an interface between the corresponding telephone system 10 and the Internet", (Bartholomew, Column 9, Lines 16-18), wherein the term Internet is "used interchangeably herein to denote a wide area packet switched network", (Bartholomew, Column 9, Lines 19-21). The combination of Guy, Bartholomew and Shaffer further discloses "determin[ing] if Digital Signal Processor (DSP) requirements **in the call request** exceed DSP availability. If the resource requirements exceed the resource availability at the time **when the call request is received**, a resource reservation mechanism **places the call request** into network resource queues for those network resources which are in short supply." (Shaffer, Abstract). Additionally, the combination of Guy, Bartholomew and Shaffer discloses, **once a call has been established**, determining whether "the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 8-9). The combination of Guy, Bartholomew and Shaffer is clearly different than "dynamically enabling and disabling signal processing functionality **during processing of the depacketized signal**, to control processor computational load", as recited in Applicants' claim 175. Applicants therefore submit that Guy, Bartholomew and Shaffer, taken alone **or in any combination**, fail to teach all of the limitations of Applicants' claims 1 and 49, as required by MPEP §2142.

Therefore, Applicants believe that claim 175 is allowable over the proposed combination of references, for at least the reasons set forth above. Applicants respectfully submit that claims 176 and 177 depend either directly or indirectly from claim 175. Because claims 176 and 177 depend from claim 175, Applicants respectfully submit that claims 176 and 177 are also allowable over the

proposed combination of references, for at least the reasons set forth above with respect to claim 175. Therefore, Applicants respectfully request that the rejection of claims 175-177 under 35 U.S.C. §103(a) be withdrawn.

Point 4: Rejections Under 35 U.S.C. §103(a): Guy, Bartholomew, Shaffer and Ohlsson

Claims 4-6 and 9-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Guy in view of Bartholomew and Shaffer, as applied to claim 1 above, and further in view of Ohlsson (US 6,452,950, hereinafter "Ohlsson"). The Applicants respectfully traverse the rejection. The Applicants respectfully submit that claims 3-12 and 183-185 depend either directly or indirectly from independent claim 1. Applicants believe that claim 1 is allowable over the proposed combination of references, in that Ohlsson fails to overcome the deficiencies of Guy, Bartholomew and Shaffer, as set forth above. Because claims 3-12 and 183-185 depend from independent claim 1, Applicants respectfully submit that claims 3-12 and 183-185 are allowable over the proposed combination of references, as well. Therefore, for at least the reasons set forth above, Applicants respectfully request that the rejection of claims 4-6 and 9-11 under 35 U.S.C. §103(a) be withdrawn.

Point 5: Rejections Under 35 U.S.C. §103(a): Guy, Bartholomew, Shaffer and Sanders

Claims 185, 188 and 191 were rejected under 35 U.S.C. §103(a) as being unpatentable over Guy in view of Bartholomew and Shaffer, as applied to claims 1, 49 and 175 above, and further in view Sanders et al. (US 6,704,308, hereinafter "Sanders"). The Applicants respectfully submit that claims 185, 188 and 191 depend either directly or indirectly from independent claims 1, 49 and 175, respectively. Applicants believe that claims 1, 49 and 175 are allowable over the proposed combination of references, in that Sanders fails to overcome the deficiencies of Guy, Bartholomew and Shaffer, as set forth above. Because claims 185, 188 and 191 depend,

respectively, from independent claims 1, 49 and 175, Applicants respectfully submit that claims 185, 188 and 191 are allowable over the proposed combination of Guy, Bartholomew, Shaffer and Sanders, as well. Therefore, for at least the reasons set forth above, Applicants respectfully request that the rejection of claims 185, 188 and 191 under 35 U.S.C. §103(a) be withdrawn.

Point 6: Rejections Under 35 U.S.C. §103(a): Guy, Bartholomew and Griffin

Claim 178 and 192 were rejected under 35 U.S.C. §103(a) as being unpatentable over Guy in view of Bartholomew, and further in view Griffin et al. (US 5,826,222, hereinafter "Griffin"). The Applicants respectfully submit that the Guy, Bartholomew and Griffin references, taken alone or in any combination, fail to teach or suggest, at least, "comparing the estimated pitch period to a plurality of thresholds", or "packetizing a voice signal, a fax signal, or a data signal in a packetization engine to generate a packetized signal, based upon the comparing the estimated pitch period to a plurality of thresholds and at least one power measurement of the voice band signal" as set forth in Applicants' claim 178.

Rather, Guy discloses determining whether a discriminator 20 will direct a switch 18 "to pass the signals coming in to the switch either to a transformer 22 of aural information or to demodulator equipment 24 depending upon whether the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 4-9). Griffin discloses the following:

> A method of encoding speech by **analyzing a digitized speech signal to determine excitation parameters** for the digitized speech signal is disclosed. The method includes dividing the digitized speech signal into at least two frequency bands, **determining a first preliminary excitation parameter** by performing a nonlinear operation on at least one of the frequency band signals to produce a modified frequency band signal and determining the first preliminary excitation parameter using the modified frequency band signal, **determining a second preliminary excitation parameter** using a method different from the first method, and **using the first and second preliminary excitation parameters to determine an excitation parameter for**

> **the digitized speech signal**. The method is useful in encoding speech. Speech synthesized using the parameters estimated based on the invention generates high quality speech at various bit rates useful for applications such as satellite voice communication.

(Griffin, Abstract).

The Office Action alleges that Guy discloses "**detecting a pitch period** of in [sic] a voice band signal (see FIG. 2, Discriminator 20 with voice detection functionality; see col. 3, line 60 to col. 4, line 2; detecting voice pitch frequency/period of a signal. Note that frequency=1/period, and thus when detecting a frequency it is also detecting the period.)" (Office Action, Page 13, Lines 17-20). However, Applicants' claim 178 sets forth "**estimating a pitch period** of a voice band signal using an autocorrelation function." Guy fails to disclose estimating a pitch period. Rather, Guy discloses "distinguishing between aural information such as voice and modulated data such as facsimile [] on the basis of variations in the frequency of the signals representing the aural information." (Guy, Column 3, Lines 61-65). Guy recognizes that "voice information has a variable frequency" (Guy, Column 3, Lines 65-66) while modulated data has a constant frequency. Further, Guy discloses distinguishing between aural information and modulated data by determining whether "the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 8-9). This is different than "**estimating a pitch period** of a voice band signal using an autocorrelation function," as set forth in Applicants' claim 178.

The Office Action further alleges that Guy discloses "comparing detected pitch period to a plurality of thresholds (see col. 3, line 60-69; discriminating the voice signal pitch frequency/period by comparing to voice frequency thresholds/acceptable-level between 300 hertz and 2000 hertz)." (Office Action, Page 14, Lines 1-3). As mentioned above, the **estimated** pitch period (as recited in Applicants' claim 178) is different than **detecting** whether an in-coming signal has a variable frequency or a constant frequency (as disclosed in Guy). Additionally, Guy only discloses that "voice information has a variable frequency (such as between 300 hertz and 2000 hertz)...." (Guy, Column 3, Lines 65-66). Acknowledging that voice information has a variable frequency rate in a particular range is different than "comparing the estimated pitch period to a plurality of thresholds." As explained above, Guy fails to disclose

"comparing the estimated pitch period to a plurality of thresholds," as recited in Applicants' claim 178. Rather, Guy discloses distinguishing between aural information and modulated data (Guy, Column 3, Lines 61-65) by determining whether "the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 8-9).

Additionally, the Office Action alleges that Guy discloses "packetizing a voice signal (see FIG. 1, Telephone/source of aural information 102), a fax signal (see FIG. 1, Fax 110), or a data signal (see FIG. 1, packetizer 36) to generate a packetized signal based on comparing (see FIG. 2, a packetized signal transmitted by multiplexer 48 after comparing to detect/determine voice or fax signal; see col. 3, line 1 to col. 4, line 55; see col. 5, line 45 to col. 6, line 18)." (Office Action, Page 14, Lines 4-9). As demonstrated above, Guy fails to disclose "comparing the estimated pitch period to a plurality of thresholds," as recited in Applicants' claim 178. Rather, Guy discloses distinguishing between aural information and modulated data (Guy, Column 3, Lines 61-65) by determining whether "the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 8-9). Therefore, Guy also fails to disclose "generat[ing] a packetized signal, **based upon the comparing the estimated pitch period to a plurality of thresholds**," as recited in Applicants' claim 178. Applicants' appreciate the recognition in the Office Action that "[n]either Guy nor Bartholomew explicitly discloses using autocorrelation function and at least one power measurement of the voice band signal." (Office Action, Page 15, Lines 3-4).

With regard to Griffin, the Office Action alleges that Griffin discloses "comparing the estimated pitch period to a plurality of thresholds (see FIG. 2, voice/unvoiced (V/UV) parameter estimation unit 24; or see FIG. 6, V/UV parameter estimation unit 46 determines preliminary estimated V/UV parameter by comparing threshold/value of zero and on half in order to determine voice or unvoice [sic] signal; see col. 7, line 16-25; see col. 8, line 61 to col. 9, line 25)." (Office Action, Page 15, Lines 10-14). However, Griffin fails to disclose "comparing the estimated pitch period to a plurality of thresholds," as recited in Applicants' claim 178. Rather, Griffin discloses "determining a first preliminary excitation parameter..., determining a second preliminary excitation parameter..., and using the first and second preliminary excitation

parameters to determine an excitation parameter for the digitized speech signal." (Griffin, Abstract). The V/UV parameter in Griffin is different than the estimated pitch period in Applicants' claim 178. Griffin teaches that "a pitch period n (or equivalently a fundamental frequency) is selected. Thereafter, a function $f_i(n)$ is then evaluated at the selected pitch period (or fundamental frequency) to estimate the ith voiced/unvoiced parameter." (Griffin, Column 5, Lines 27-31). Although Griffin uses a selected pitch period to estimate the ith voiced/unvoiced parameter, the V/UV parameter is not an estimated pitch period. Rather, the V/UV parameter in Griffin determines whether a signal has pitch. (Griffin, Column 1, Lines 27-29). Therefore, the V/UV parameter in Griffin is different than the "estimated pitch period" as recited in Applicants' claim 178. Nowhere in Griffin is there any mention of "comparing the estimated pitch period to a plurality of thresholds." The Office Action relies on the following section of Griffin: "The degree to which the frequency band signal is voiced varies indirectly with the value of the preliminary V/UV parameter. Thus, the frequency band signal is highly voiced when the preliminary V/UV parameter is near zero and is highly unvoiced when the parameter is greater than or equal to one half." (Griffin, Column 7, Lines 19-24). However, as mentioned above, the preliminary V/UV parameter is different than an estimated pitch period.

Additionally, the Office Action alleges that Griffin discloses "comparing and at least one power measurement of the voice band signal (see FIG. 6, U/V estimation unit 46 determine preliminary estimated V/UV parameters by comparing output of first parameter estimator 14' estimated at pitch period no to the measured [sic] measured/determined total/plurality of voice power/energy of a voice signal; see col. 9, line 20 to col. 10, line 5)." (Office Action, Page 15, Lines 15-18). As demonstrated above, Griffin fails to disclose "comparing the estimated pitch period to a plurality of thresholds," as recited in Applicants' claim 178. Rather, Griffin discloses "determining a first preliminary excitation parameter..., determining a second preliminary excitation parameter..., and using the first and second preliminary excitation parameters to determine an excitation parameter for the digitized speech signal." (Griffin, Abstract). Therefore, Griffin also fails to disclose "generat[ing] a packetized signal, **based upon the comparing the estimated pitch period to a plurality of thresholds**," as recited in Applicants' claim 178.

Guy, Bartholomew and Shaffer, taken alone **or in any combination**, fail to teach or suggest, at least, "comparing the estimated pitch period to a plurality of thresholds", or "packetizing a voice signal, a fax signal, or a data signal in a packetization engine to generate a packetized signal, based upon the comparing the estimated pitch period to a plurality of thresholds and at least one power measurement of the voice band signal" as set forth in Applicants' claim 178.

Rather, the combination of Guy, Bartholomew and Griffin discloses "providing an interface between the corresponding telephone system 10 and the Internet", (Bartholomew, Column 9, Lines 16-18), wherein the term Internet is "used interchangeably herein to denote a wide area packet switched network", (Bartholomew, Column 9, Lines 19-21). The combination of Guy, Bartholomew and Griffin further discloses distinguishing between aural information and modulated data (Guy, Column 3, Lines 61-65) by determining whether "the in-coming signals have a variable frequency or a constant frequency." (Guy, Column 4, Lines 8-9). Additionally, the combination of Guy, Bartholomew and Griffin discloses that if the in-coming signals are determined to be aural information (i.e., variable frequency), then a method of encoding speech by analyzing a digitized speech signal to determine excitation parameters for the digitized speech signal, wherein the digitized speech signal is divided into at least two frequency bands; a first preliminary excitation parameter is determined; a second preliminary excitation parameter is determined using a method different from the first method; and using the first and second preliminary excitation parameters to determine an excitation parameter for the digitized speech signal. (Griffin, Abstract). Further, the first and second preliminary excitation parameters are obtained using autocorrelation. (See Griffin, Column 9, Lines 16-18; Column 9, Line 66 through Column 10 Line 1; Column 10, Lines 5-24). The combination of Guy, Bartholomew and Griffin is clearly different than "comparing the estimated pitch period to a plurality of thresholds", or "packetizing a voice signal, a fax signal, or a data signal in a packetization engine to generate a packetized signal, based upon the comparing the estimated pitch period to a plurality of thresholds and at least one power measurement of the voice band signal" as set forth in Applicants' claim 178. Applicants therefore submit that Guy, Bartholomew and Griffin, taken

alone **or in any combination**, fail to teach all of the limitations of Applicants' claim 178, as required by MPEP §2142.

Therefore, Applicants believe that claim 178 is allowable over the proposed combination of references, for at least the reasons set forth above. Applicants respectfully submit that claim 192 depends from claim 178. Because claim 192 depends from claim 178, Applicants respectfully submit that claim 192 is also allowable, for at least the reasons set forth above with respect to claim 178. Therefore, Applicants respectfully request that the rejection of claims 178 and 192 under 35 U.S.C. §103(a) be withdrawn.

Applicants reserve the right to argue additional reasons supporting the allowability of claims 1, 3-12, 26, 38-49, 74, 91 and 175-192 should the need arise in the future.

CONCLUSION

The Applicants wish to thank the Examiner for recognition of the allowable subject matter of claims 26, 38-48, 74, 91, 179-182, 186 and 189.

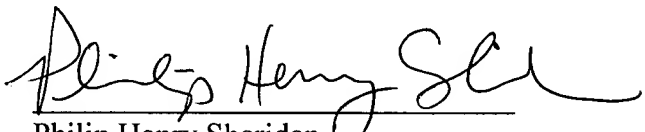
The Applicants believe that in light of the reasons set forth above, all of claims 1, 3-12, 26, 38-49, 74, 91 and 175-192 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicants invite the Examiner to telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

The Commissioner is hereby authorized to charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 13-0017.

Respectfully submitted,

Dated: June 13, 2007



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